

## BOROUGH OF SUSSEX, SUSSEX COUNTY, NEW JERSEY.

Population—Census of 1930 was 1,415.

IN GENERAL: Located on the New York, Susquehanna & Western and the Lehigh & New England Railroads about 6 miles south of the New York State boundary line. It is a residential community with 11 small industries normally employing about 180. It is the business center for the surrounding agricultural and dairying country. Area about 1 sq. mi. Elevations range from 420 to 618 ft. Streets are improved and in good condition. Railroad crossings at grade should not seriously affect the response of fire apparatus, but traffic congestion and parked vehicles could seriously delay fire department operations in the business district, while steep grades would effect delays to some residential areas.

WATER SUPPLY: The borough owns and operates the supply works, distribution system and appurtenances supplying water for domestic and fire protection purposes to Sussex only. The organization consists of a water commissioner who functions as superintendent and a chlorine operator at the intake reservoir. These employees are appointed annually by the Board of Water Commissioners and perform all duties with laborers as needed. A consulting engineer is employed when necessary. The superintendent is a member of the fire department and responds to alarms of fire. A small truck is provided and additional vehicles are available for emergency repairs. Records are limited to a detailed distribution map and consumption and operating data. Supply Works: Built in 1897. The supply is obtained from Lake Rutherford, located in Wantage Township about 6 miles north of the business district. This is a natural lake supplied by springs and a water shed of about 400 acres with a stone and masonry dam at elevation 1,302 ft. and a capacity of about 170,000,000 gals. The lake area is about 75 acres and the average daily supply is in excess of 500,000 gals. The supply is discharged through a 10-in. outlet with a manually controlled gate and follows a natural channel for a distance of about 1 mile to an intake reservoir whence the supply is chlorinated and flows through an 8-in. Gem meter, 29,000 ft. of 8-in. main and a Ross pressure regulator to the distribution system. Intake Reservoir: Located at Coleville and is formed by an earth embankment with concrete core wall and adequate spillway construction at about elevation 840. It has a capacity of about 2,500,000 gals. and a depth of about 12 ft. The collecting grounds embrace the brook from Lake Rutherford and also Adams Brook over a drainage area of about 1.4 sq mi with an aggregate average yield of about 1.0 million gals. Consumption: The average daily consumption during 1935 was about 0 228 million gals. At the time of inspection there were about 450 services, of which 6 of the larger consumers are metered. Distribution System: In one service consisting of incomplete 4- and 6-in. gridiron and unsupported branches from an 8-in. artery which is an extension of the 8-in. supply line; see map. Pipe: All cast iron, tar coated, bell and spigot joint, Class "B" and "C," laid with about 4½-ft. cover No trouble reported from frozen mains or electrolysis. Total length within the municipal limits 29,900 ft.; 26.1% 4-in., 62 2% 6-in, 11.7% 8-in Gate Valves: There are 43 on the system in Sussex of R. D. Wood make, set with iron boxes at grade. Direction of operation is uniform. Valves are not subject to inspection except as necessitated by repairs. The fire department is notified when valves are closed affecting the supply to hydrants. Hydrants: There are 57 on the system of Mathews make. All have two 2½-in. outlets, 4-in. barrels and 4-in. ungated branches; six, including one in the business district, have one 4-in. outlet in addition Hydrants are inspected quarterly and were in fair to poor condition at time of inspection. Pressures: No recording gauge on the system. A pressure gauge in the commissioner's place of business in the business district at about elevation 450 showed 95 lbs, at 11.00 a m. during inspection. Pressures at night increase as much as 20 lbs Readings taken at 8 distributed locations showed pressures ranging from 72 to 117 with an average of 89 lbs. Fire Flow Tests: Probable supply available for fire protection purposes was measured on

June 23, 1937, by means of Pitot tube. Location of hydrant, discharge in gals. per minute, pressure before flow and pressure during flow were as follows:

Main St. and Newton Ave., 630—101—25. Brookside Ave., at R. R., 240—117—\*. Hamburg Ave., S. of Grove St., 500—102—20. Walnut St., S. of Grove St., 250—101—\*. Third St. and Maple Ave., 320—76—13. Second St. and Maple Ave., \*—72—\*. Unionville Ave. and E. Main St., 250—71—9. Newton Ave., E. of Borough Limits, 280—72—6. \* No reading taken.

FIRE DEPARTMENT: Volunteer organization of two companies under the control of the borough which owns quarters, apparatus and equipment and makes an annual appropriation of \$1,200 for the support of the department. Total active membership 40, including a chief, assistant chief, 3 foremen and 3 assistant foremen. A minimum of 15 members are available at all times. Officers are elected annually and confirmed by the Mayor and Council. Companies: Located in borough hall at Hamburg Ave. and East Main St. Building is a 2-story brick structure with tar and gravel roof, concrete apparatus floor, steam heat, electric lights and telephone. Wall Kill Hose Co.: Active membership 22. Equipment: One 1924 Foamite-Childs-Stewart hose and chemical car carrying two 35-gal. chemical tanks, 100 ft. of chemical hose, 600 ft. of 2½-in. hose, two short ladders and fair minor equipment. One old Studebaker converted hose car carrying one 40-gal. chemical tank, 100 ft. of chemical hose, 500 ft. of 22-in. hose and fair minor equipment. Protection Hook and Ladder Co.: Active membership 18. Equipment: One 1924 Foamite-Childs-Stewart 350-g.p m. pumping engine carrying two 35-gal chemical tanks, 100 ft. of chemical hose, 500 ft. of 2½-in. hose, four ladders—12-, 13-, 15- and 40-ft. in length and fair minor equipment. Hose: All 2½-in. hose is C.R.L. with National Standard screw couplings. There is no reserve hose; 50% of the total supply is over 5 years old and all hose is tested annually at 120 lb. hydrant pressure. No suitable drying facilities provided. Operations: Department governed by borough ordinance and company by-laws. Chief has full control of apparatus and of men at fires and drills. There are four appointed drivers for each apparatus. Motors are started three times each week Drills and Training: Department drills are being held monthly; previous to the current year no regular drills were held. Drilling is entirely at the discretion of the chief. Drills when held consist of engine operation, hose and ladder work. Fire Methods: Chemical streams are used on incipient fires supported by hydrant streams with line gates and shut-off nozzles or open playpipes with small tips. Engine connected only on order. No heavy stream appliances or salvage equipment provided Response to Alarms: The entire department responds to all borough alarms. One hose car remains in borough on outside calls. Aid may be secured from the surrounding volunteer departments at Hamburg, Franklin, Ogdensburg, Sparta and Newton at distances of 5 to 12 mi. Building Inspection: The chief makes occasional inspections of mercantile and public buildings, but municipal regulations for the elimination of hazardous conditions are lacking. Records and Reports: Records are fairly complete and consist of a log showing alarms, losses, attendance and equipment used. Monthly reports are made to the County Association and annually to the Mayor and Council. Fire Alarms: Telephoned through the local exchange in the business district to a public garage where air whistle is operated.

POLICE DEPARTMENT: Consists of a chief and 3 special officers.

BUILDING LAWS: Limited to a zoning ordinance of little value from a fire protection standpoint.

**EXPLOSIVES AND FLAMMABLES:** No municipal regulations. The state laws restrict the use of fireworks to bonded organizations.